

# **Bass**

**Sec 2 T1S R98W**

**Yellow Creek Federal XOM 2-22 Pad**

**YCF 2-22-0212**

**Wellbore #1**

**Plan: Plan #1**

## **Survey Report - Geographic**

**23 May, 2008**

# New Tech

## Survey Report - Geographic

<b>Company:</b>	Bass	<b>Local Co-ordinate Reference:</b>	Well YCF 2-22-0212
<b>Project:</b>	Sec 2 T1S R98W	<b>TVD Reference:</b>	WELL @ 6335.0ft (Original Well Elev)
<b>Site:</b>	Yellow Creek Federal XOM 2-22 Pad	<b>MD Reference:</b>	WELL @ 6335.0ft (Original Well Elev)
<b>Well:</b>	YCF 2-22-0212	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 2003.16 Single User Db

<b>Project</b>	Sec 2 T1S R98W, Rio Blanco County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site	Yellow Creek Federal XOM 2-22 Pad				
Site Position:		Northing:	1,256,189.47 ft	Latitude:	40° 0' 4.130 N
From:	Lat/Long	Easting:	2,198,757.56 ft	Longitude:	108° 21' 38.000 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.85 °

Well	YCF 2-22-0212					
Well Position	+N-S	0.0 ft	Northing:	1,256,209.55 ft	Latitude:	40° 0' 4.310 N
	+E-W	0.0 ft	Easting:	2,198,699.81 ft	Longitude:	108° 21' 38.750 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,310.0ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	9/24/2007	11.05	66.19	52,869

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	305.16	

<b>Survey Tool Program</b>	<b>Date</b>	5/23/2008			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.0	12,614.0	Plan #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Planned Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Map Northing (ft)</b>	<b>Map Easting (ft)</b>	<b>Latitude</b>	<b>Longitude</b>	
0.0	0.00	0.00	0.0	0.0	0.0	1,256,209.55	2,198,699.81	40° 0' 4.310 N	108° 21' 38.750 W	
120.0	0.00	0.00	120.0	0.0	0.0	1,256,209.55	2,198,699.81	40° 0' 4.310 N	108° 21' 38.750 W	
858.4	14.77	305.16	850.2	54.5	-77.4	1,256,266.51	2,198,624.24	40° 0' 4.848 N	108° 21' 39.744 W	
6,762.5	14.77	305.16	6,559.4	921.1	-1,307.8	1,257,172.30	2,197,422.45	40° 0' 13.412 N	108° 21' 55.556 W	
7,747.0	0.00	0.00	7,533.0	993.7	-1,411.0	1,257,248.25	2,197,321.69	40° 0' 14.130 N	108° 21' 56.881 W	
12,614.0	0.00	0.00	12,400.0	993.7	-1,411.0	1,257,248.25	2,197,321.69	40° 0' 14.130 N	108° 21' 56.881 W	

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## Survey Report - Geographic

<b>Company:</b>	Bass	<b>Local Co-ordinate Reference:</b>	Well YCF 2-22-0212
<b>Project:</b>	Sec 2 T1S R98W	<b>TVD Reference:</b>	WELL @ 6335.0ft (Original Well Elev)
<b>Site:</b>	Yellow Creek Federal XOM 2-22 Pad	<b>MD Reference:</b>	WELL @ 6335.0ft (Original Well Elev)
<b>Well:</b>	YCF 2-22-0212	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	EDM 2003.16 Single User Db

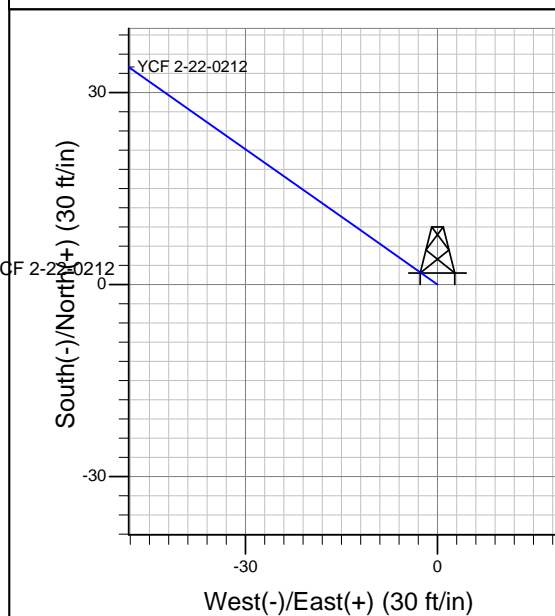
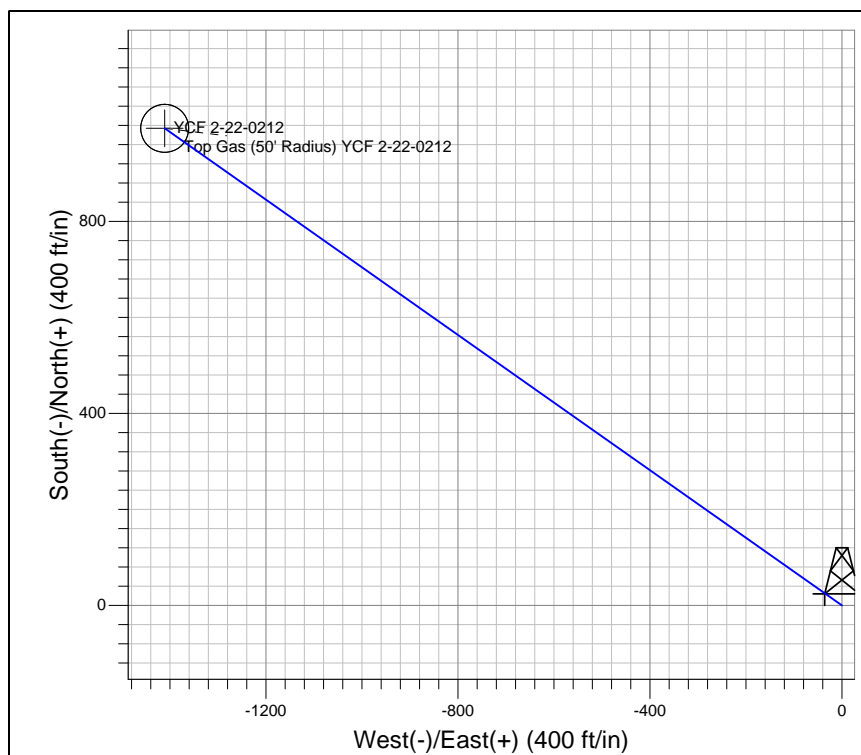
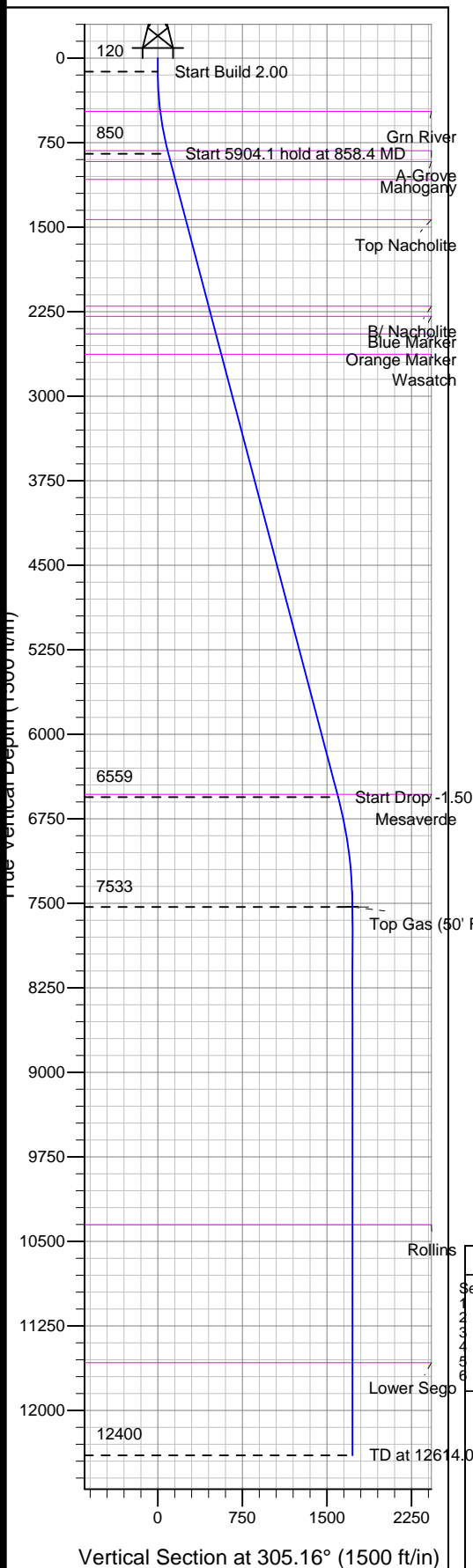
Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Top Gas (50' Radius)	0.00	0.00	7,533.0	993.7	-1,411.0	1,257,248.25	2,197,321.69	40° 0' 14.130 N	108° 21' 56.881 W
- plan hits target									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
10,567.0	10,353.0	Rollins				
6,735.3	6,533.0	Mesaverde				
2,510.7	2,448.0	Orange Marker				
2,350.4	2,293.0	Blue Marker				
2,696.9	2,628.0	Wasatch				
473.9	473.0	Grn River				
1,461.1	1,433.0	Top Nacholite				
1,093.9	1,078.0	B-Grove				
830.3	823.0	A-Grove				
11,792.0	11,578.0	Lower Sego				
2,257.4	2,203.0	B/ Nacholite				
928.5	918.0	Mahogany				

Checked By: _____	Approved By: _____	Date: _____
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Well Name: YCF 2-22-0212  
Surface Location: Yellow Creek Federal XOM 2-22 Pad  
North American Datum 1983 , US State Plane 1983 Colorado Northern Zone  
Ground Elevation: 6310.0  
+N/-SE/-W Northing Easting Latitude Longitude Slot  
0.0 0.0256209.52198699.8140° 0' 4.31008° 21' 38.750 W



Project: Sec 2 T1S R98W  
Site: Yellow Creek Federal XOM 2-22 Pad  
Well: YCF 2-22-0212  
Plan: Plan #1

Azimuths to True North  
Magnetic North: 11.05°  
Magnetic Field  
Strength: 52869.2snT  
Dip Angle: 66.19°  
Date: 9/24/2007  
Model: IGRF200510

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
473.0	473.9	Grn River
823.0	830.3	A-Grove
918.0	928.5	Mahogany
1078.0	1093.9	B-Grove
1433.0	1461.1	Top Nacholite
2203.0	2257.4	B/ Nacholite
2293.0	2350.4	Blue Marker
2448.0	2510.7	Orange Marker
2628.0	2696.9	Wasatch
6533.0	6735.3	Mesaverde
10353.0	10567.0	Rollins
11578.0	11792.0	Lower Sego

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1	120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.0	
2	858.4	14.77	305.16	850.2	54.5	-77.4	2.00	305.16	94.6	
3	6762.5	14.77	305.16	6559.4	921.1	-1307.8	0.00	0.00	1599.6	
4	7747.0	0.00	0.00	7533.0	993.7	-1411.0	1.50	180.00	1725.8	Top Gas (50' Radius) YCF 2-22-0212
5	12614.0	0.00	0.00	12400.0	993.7	-1411.0	0.00	0.00	1725.8	

No annotation data is available.